

WHAT IS CLAIMED IS:

1. A method for stimulating cell growth comprising:
administering to a skin or hair of a candidate a sponge protein hydrolysate which is a product by acidic hydrolysis of sponge skeleton fibers (spongin fibers) obtained from refined sponges as the raw material in an amount effective to stimulate cell growth of the skin or hair, said product having (i) a molecular weight of less than 5,000, with light coloring, and (ii) a human cell growth stimulating activity.
2. The method according to Claim 1, wherein the sponge protein is in the form of a sponge protein solution.
3. The method according to Claim 2, wherein the sponge protein solution has a concentration of about 0.01% to about 15% by weight.
4. The method according to Claim 1, wherein the sponge protein hydrolysate is administrated in the form of food product materials, pet food materials, cosmetics, or medicinal products.
5. The method according to Claim 1, wherein the protein hydrolysate has a growth stimulating effect on cells derived from mammals.
6. The method according to Claim 1, wherein the protein hydrolysate is produced by treating a sponge protein solution which is obtained by dissolving dried sponges and then neutralizing the resulting supernatant, with protein hydrolases.
7. The method according to Claim 6, wherein the protein hydrolases are dissociated, crosslinked with one another, formed into inclusion compounds, or immobilized onto an insoluble carrier.
8. The method according to Claim 6, wherein the protein hydrolases are either endo-type or exo-type protein hydrolase alone or in combination in an appropriate ratio.
9. The method according to Claim 1, wherein the protein hydrolysate is functional low-molecular-weight peptides and/or amino acids which are obtained with an ultrafiltration membrane, microfiltration membrane, gel filtration or ion-exchange resins.
10. The method according to Claim 9, wherein the functional low-molecular-weight peptides and/or amino acids have a growth stimulating effect on cells derived from mammals.

11. The method according to Claim 1, wherein the sponge protein hydrolysate is a product of hydrolysis carried out using an acidic solution in which the pH is adjusted to 1 using electrolytic acidic water with a pH of less than 2.5 and an oxidation-reduction potential of more than 1,000 mV admixed with an acid to obtain sponge proteins having a molecular weight of less than 5,000, using sponge skeleton fibers (spongin fibers) refined from sponges as the raw material.

12. The method according to Claim 11, wherein the sponge protein hydrolysate is a lightly colored solution having a concentration of 1 to 30% by weight.

13. The method according to Claim 2, wherein the solution has growth stimulating activity on human epidermal keratinocytes.

14. The method according to Claim 13, wherein the solution has a concentration of more than 0.00625% by weight.

15. The method according to Claim 2, wherein the solution has growth stimulating activity on human fibroblasts.

16. The method according to Claim 1, wherein the growth stimulating activity is reducing wrinkles on human skins.

17. The method according to Claim 1, wherein the growth stimulating activity is protecting the hair cuticles.

18. The method according to Claim 17, wherein the solution is applied to the hair before applying a bleaching agent.

19. The method according to Claim 17, wherein the solution has a concentration of approximately 1% by weight.

20. The method according to Claim 2, wherein the solution has a concentration of about 0.1% to 15% by weight.